

Palaeoanthropologist Katerina Harvati receives ERC Advanced Grant

Innovative combination of methods and data to trace *Homo sapiens*' early settlement of southeastern Europe



Katerina Harvati-Papatheodorou
Photo: Berthold Steinhilber/laif

Professor Katerina Harvati-Papatheodorou from the Institute of Archaeological Sciences at the University of Tübingen and the Senckenberg Centre for Human Evolution and Palaeoenvironment of the Leibniz Association has received an Advanced Grant from the European Research Council (ERC). For her research project "Our first steps to Europe: Pleistocene *Homo sapiens* dispersals, adaptations and interactions in South-East Europe" (FIRSTSTEPS), she will receive funding of 2.58 million euros over the next five years. Her project partner is Professor Stefano Benazzi of the University of Bologna, for whose collaboration the ERC is providing a further 0.72 million euros.

In the FIRSTSTEPS project, Harvati and Benazzi will explore the traces left by early *Homo sapiens* in Europe some 200,000 to 30,000 years ago in the southeast of the continent. "According to recent findings, this region could play a key role in the dynamic process of encounters between various early human groups, their dispersal and evolution," says Katerina Harvati. The ERC's Advanced Grants fund groundbreaking projects by established researchers with an outstanding track record.

Traces of evolution in Europe

This is Harvati's third ERC grant. Her project "Paleoanthropology at the Gates of Europe" from a Starting Grant in 2011 was followed by a Consolidator Grant in 2016 with the project CROSSROADS, in which she investigates the appearance of early humans in Greece around 500,000 years ago and traces the environmental conditions in which they lived. In her new project, Harvati jumps forward several hundred thousand years, to the period from 200,000 to 30,000 years ago. "Despite many new details that have emerged on the origins of anatomically modern humans, the exact circumstances of their arrival in Europe are still obscure," Harvati says.

"Recently, work by my team revealed evidence that early migrations of *Homo sapiens* from Africa to Europe occurred 150,000 years earlier than previously thought in research circles. That gave me the idea for the new project." She says this sheds a whole new light on human evolution in Europe. We need to take a fresh look at the spread of *Homo sapiens*, and its encounters with other human groups such as Neanderthals, with a focus on southeastern Europe, Harvati says.

A combination of methods applied to a wide range of sites

In the FIRSTSTEPS project, Harvati plans to further investigate the hypothesis of this unexpected European chapter in the history of early *Homo sapiens*, both through new data from field research and by examining existing collections and finds from previous excavations that date to the period 200,000 to 30,000 years ago. "We want to get an overview beyond Greece in southeastern Europe, in the neighboring Balkan states and also in Italy. The goal is to bring together the paleoanthropological findings of the regions," she explains. Methods from virtual anthropology and paleogenetics, among others, are combined with various state-of-the-art excavation and dating techniques.

With the ERC Advanced Grant, Katerina Harvati continues a series of successes. As recently as March 15, 2021, she received the German Research Foundation's Gottfried Wilhelm Leibniz Prize for her research on human evolution. The prize is endowed with 2.5 million euros and is considered the most important German research award.

(<https://www.youtube.com/watch?v=3z9PcyVedwE>)

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